

WIRE-IDENTIFICATION PLUGS FOR ELECTRONIC DEVICES

CROSS REFERENCE TO RELATED APPLICATIONS

Not Applicable.

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STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

Not Applicable.

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REFERENCE TO A MICROFICHE APPENDIX

Not Applicable.

BACKGROUND OF THE INVENTION

TECHNICAL FIELD

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This invention relates to a wire-identification kit and, more particularly, to wire-identification plugs for assisting users to reconnect a plurality of wires after they are removed from an electronic device.

PRIOR ART

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As is known, in the implementation of electrical systems it is essential that all the used electric cables be identified in relation to a system diagram so as to facilitate their installation and subsequent interventions for maintenance.

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Various different forms of strips and bands including identifying and/or or other indicia thereon heretofore have been provided for securement about and/or support from a mid-portion of an elongated member. However, these previously known devices are not specifically designed for use in identifying elongated cables and, accordingly, do not include the simplified structure of the instant invention capable of attaching an identifying tag to the insulation disposed about an electrical cable or wire in a manner such that the identifying tag will be maintained stationary

on the cable, independent of vertical or horizontal orientation of the cable and/or vibration of the cable.

Another common method of identifying wires, electrical terminals and the like comprises attaching pre-printed strips of marked, adhesive tape on the wire to create the desired marking. Commonly, such pre-printed strips are provided on
5 small cards, which can be carried around with the electrician or electrical technician responsible for marking the wires. The disadvantage of such a method of marking wires is that it is difficult and time consuming to wrap a number of pieces of adhesive tape around the wire to be marked one at a time. It is particularly difficult
10 to mark wires in such a fashion when the wires are disposed in a tight space. A further disadvantage of such devices is that the adhesive tape upon which each of the symbols constituting the marking is placed commonly wear out after a period of time. The adhesive may also become loosened due to heat or high humidity.

Accordingly, a need remains for multi-colored wire-identification plugs for
15 electronic devices, which overcome the above-noted shortcomings.

BRIEF SUMMARY OF THE INVENTION

In view of the foregoing background, it is therefore an object of the present invention to provide a kit including multi-numbered wire-identification plugs for
20 electronic devices. These and other objects, features, and advantages of the invention are provided by a kit for marking a predetermined position of at least one wire connected to an electronic device.

The kit includes at least one male plug that has a substantially cylindrical body and front and rear end portions. The male plugs are preferably formed from
25 non-conductive material and the body has a centrally disposed longitudinal axis that includes an elongated prong section extending therealong. The prong section is integral with the body and has a first end portion disposed substantially medially of the front and rear end portions. The prong section is preferably formed from non-conductive material that is resilient so that the prong section can be selectively
30 adapted into a plurality of shapes as desired by a user. For example, the prong

section may be adapted to have an octagonal cross-section, in a preferred embodiment.

5 The prong section further has a second end portion spaced forwardly of the front-end portion and is removably positionable into an input jack of an electronic device. The rear end portion of the body advantageously has indicia thereon, which is unique to the selected input jack.

10 The present invention further includes at least one female plug that has a substantially cylindrical body and a centrally disposed longitudinal axis. The female plugs are preferably formed from non-conductive material. The body has a groove formed therein and extends along the longitudinal axis thereof for advantageously receiving a male end portion of a wire when removed from an input jack. The body further has a visible front-end portion that has indicia thereon, corresponding to the rear end portion indicia of the male plug so that a user can conveniently identify a select input jack for receiving a corresponding wire. The front and rear end portion
15 indicia preferably have identical numerals, and may conveniently have identical colors. Of course, various indicia may be employed by the present invention such as letter or symbols, for example, as well known to a person of ordinary skill in the art.

20 BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

The novel features believed to be characteristic of this invention are set forth with particularity in the appended claims. The invention itself, however, both as to its organization and method of operation, together with further objects and advantages thereof, may best be understood by reference to the following
25 description taken in connection with the accompanying drawings in which:

FIG. 1 is a perspective view showing a plurality of male wire-identification plugs attached to an electronic device, in accordance with the present invention;

FIG. 2 is an enlarged perspective view of a female plug attached to a wire;

FIG. 3 is an enlarged front-elevational view of the female plug shown in FIG.

30 2;

FIG. 4 is an enlarged cross-sectional view of the male and female plugs shown in FIG. 1 and FIG. 2;

FIG. 5 is a cross-sectional view of the male plug shown in FIG. 1 wherein the prong section has been adapted to engage a corresponding electronic device; and

5 FIG. 6 is an enlarged cross-sectional view of the male plug shown in FIG. 1 wherein the prong section has been adapted to form an octagonal cross-section.

DETAILED DESCRIPTION OF THE INVENTION

The present invention will now be described more fully hereinafter with
10 reference to the accompanying drawings, in which a preferred embodiment of the invention is shown. This invention may, however, be embodied in many different forms and should not be construed as limited to the embodiment set forth herein. Rather, this embodiment is provided so that this application will be thorough and complete, and will fully convey the true scope of the invention to those skilled in the
15 art. Like numbers refer to like elements throughout the figures.

The kit of this invention is referred to generally in FIGS. 1-6 by the reference numeral 10 and is intended to provide a wire-identification plug kit for electronic devices. It should be understood that the kit 10 may be employed with various type of electronic devices and should not be limited to VCR's only.

20 Referring initially to FIG. 1, the kit 10 includes at least one male plug 20 that has a substantially cylindrical body 21 and front 22 and rear 23 end portions. The male plugs 20 are formed from non-conductive material and the body 21 has a centrally disposed longitudinal axis that includes an elongated prong section 24 extending therealong. The cylindrical non-conductive body 21 of the male plug 20
25 makes it safe and easy to grasp in order to remove or insert the plug 20 out of or into an input jack 31. The prong section 24 is integral with the body 21 and has a first end portion 25 disposed substantially medially of the front 22 and rear 23 end portions. The prong section 24 is formed from non-conductive material that is resilient so that the prong section 24 can be selectively adapted into a plurality of

shapes as desired by a user. For example, the prong section 24 may be adapted to have an octagonal cross-section, in a preferred embodiment.

5 The prong section 24 further has a second end portion 26 spaced forwardly of the front-end 22 portion and is removably positionable into an input jack 31 of an electronic device 30. The rear end portion 23 of the body 21 advantageously has indicia 40 thereon, which is unique to the selected input jack 31.

10 The present invention further includes at least one female plug 50 that has a substantially cylindrical body 51 and a centrally disposed longitudinal axis. The female plugs 50 are formed from non-conductive material. The cylindrical non-conductive body 51 of the female plug 50 makes it safe and easy to grasp in order to attach or remove the plug 50 from a wire 60. The body 51 has a groove 52 formed therein and extends along the longitudinal axis thereof for advantageously receiving a male end portion 61 of a wire 60 when removed from an input jack 31. The groove 52 of the female plug 50 may also receive the prong section 26 of the male plug 20, allowing for easy storage of the kit 10 during non-operational periods.

15 The body 51 further has a visible front-end portion 53 that has indicia 70 thereon, corresponding to the rear end portion 23 indicia 40 of the male plug 20 so that a user can conveniently identify a selected input jack 31 for receiving a corresponding wire 60. The front 53 and rear end 23 portion indicia 70, 40 have identical numerals, and may conveniently have identical colors. Of course, various indicia 40, 70 may be employed by the present invention such as letter or symbols, for example, as well known to a person of ordinary skill in the art. The numbered indicia 40, 70 allow individuals that may suffer from colorblindness to easily install and reinstall their own electronic equipment, without having to pay someone for
25 installation.

The appealing features of the kit 10 are its error prevention, ease of use, elimination of costly reinstallation fees, and convenience. The kit 10 makes the breakdown of any home entertainment equipment expedient and safe. Due to the numbering and coloring scheme of the kit 10 the component input jacks 31 and
30 their corresponding wires 61 can easily be matched again upon reinstallation.

While the invention has been described with respect to a certain specific embodiment, it will be appreciated that many modifications and changes may be made by those skilled in the art without departing from the spirit of the invention. It is intended, therefore, by the appended claims to cover all such modifications and changes as fall within the true spirit and scope of the invention.

In particular, with respect to the above description, it is to be realized that the optimum dimensional relationships for the parts of the present invention may include variations in size, materials, shape, form, function and manner of operation. The assembly and use of the present invention are deemed readily apparent and obvious to one skilled in the art.